



US005953811A

**United States Patent** [19]  
**Mazzochette****[11] Patent Number: 5,953,811**  
**[45] Date of Patent: Sep. 21, 1999****[54] TRIMMING TEMPERATURE VARIABLE RESISTOR****FOREIGN PATENT DOCUMENTS**

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*Attorney, Agent, or Firm*—Donald S. Cohen**[73] Assignee: EMC Technology LLC**, Cherry Hill, N.J.**[57] ABSTRACT****[21] Appl. No.: 09/008,784****[22] Filed: Jan. 20, 1998****[51] Int. Cl.<sup>6</sup> ..... H01C 7/00; H01C 17/28****[52] U.S. Cl. .... 29/612; 29/621; 29/874; 29/593****[58] Field of Search ..... 29/612, 610.1, 29/621, 593, 874; 338/22 R, 7, 8, 9, 195****[56] References Cited****U.S. PATENT DOCUMENTS**

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The temperature coefficient of resistance (TCR) of a resistor having a layer of a resistance material on a surface of a substrate and a termination layer of a conductive material at opposite ends of the resistance layer is adjusted by changing the area of at least one of the termination layers. The area of the termination layer is changed by removing a portion of the termination layer. The portion of the termination layer can be removed by making a cut through the termination layer which extends along a line across at least a portion of the termination layer. This method can be used to form matched pairs of resistors by first adjusting the resistance value of at least one of a pair of the resistors at room temperature to provide the resistors with substantially the same resistance values. The TCR of one of the resistors is then adjusted by removing a portion of one of the terminations of the resistor until both resistors have substantially the same TCR.

**5 Claims, 1 Drawing Sheet**